

U. S. DEPARTMENT OF LABOR
CHILDREN'S BUREAU
WASHINGTON

STUDIES OF USE OF MILK BY FAMILIES HAVING LITTLE CHILDREN.

III. NEW ORLEANS.

A study recently made by the nurses of the Child Welfare Association of New Orleans, La., under the direction of the Children's Bureau of the United States Department of Labor, has revealed that children in New Orleans are getting less milk to drink than the children of Baltimore and Washington, where similar studies in the use of milk by families with little children have been made for the bureau. In Baltimore 66 per cent and in Washington 45 per cent of the children 7 years old and younger (exclusive of those who are breast fed) in families visited by the nurses who made the study are not receiving any milk to drink. But of 589 New Orleans children under 8 years of age in 211 families 70 per cent of the 483 who are not breast fed are getting no fresh milk whatever to drink, while only 31.7 per cent of those who are receiving some milk are getting as much as the three cups daily, recommended for normal growth and development.

Eighty-eight, or 41.7 per cent, of the 211 families are not using any fresh milk. In Baltimore, where 365 families were visited, 107, or 29.3 per cent, have been found to be receiving no milk, and in Washington, out of 272 families, only 19, or about 7 per cent, are entirely without milk. The average daily amount purchased by the New Orleans families buying some milk is about the same as in Washington and slightly larger than in Baltimore. The comparative figures are as follows: New Orleans, 1.1 quarts; Washington, 1.1 quarts; Baltimore, 1 quart. When it is considered, however, that the families studied average six persons each; that in each family there are at least two children under 8; and that in four-fifths of the families there are children under 2, it will be seen how insufficient for the family needs are the 2 pints that constitute the average daily amount used.

New Orleans mothers, like most other mothers, are more quick to realize that children under 2 need milk than they are to appreciate its importance in the diet of older children. The study indicates that the boys and girls between 2 and 7 are faring worse than the little babies. Only 24 per cent, or less than one-fourth, of the older children get fresh milk to drink, and only about one-fifth of those that are drinking some milk are getting 3 cups a day. On the other hand, 62.7 per cent of the babies under 2 who are not being nursed by their mothers are being given milk to drink, and more than one-half of this number are getting as much as the recommended 3 cups.

Children between 2 and 7 fared better last year, when 32.2 per cent of them received fresh milk to drink, and 34.6 per cent of that number received 3 cups daily. Since there is a baby under a year old this year in 49.3 per cent of the families as against 31.8 per cent last year, it is possible that some of the milk formerly received by the older children is being diverted to the use of a newcomer.

The fact that so many children are without fresh milk at once gives rise to the question, What are they getting in its place? The answer to this question, as revealed by the New Orleans study, gives cause for grave concern. Not only are the children being deprived of the best and most nourishing food for normal development, but they are receiving injurious substitutes for that food. Of the 338 children 7 years of age and younger not breast fed who are getting no fresh milk to drink, 245, or 72.5 per cent, are being given tea or coffee, or both, in its stead. Of the remainder, 36,

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25

or 10.7 per cent, are getting fresh milk in combination with other foods; and 49, or 14.5 per cent, are sharing the meals provided for the older members of the family, which may or may not include milk in the preparation of other foods. Eight of the children, or about 2.4 per cent, are receiving condensed milk.

New Orleans families purchase an exceptionally large amount of canned milk. The average weekly purchase of the families studied was 3.4 cans, as compared with 1.6 cans in Baltimore and 0.74 in Washington. This large purchase is undoubtedly due in part to the fact that fresh milk is expensive and hard to keep in the hot climate of New Orleans, and in part to the fact that mothers do not fully realize the superiority of clean, *fresh* milk over any substitute that may be provided.

While the families studied represent only a small proportion of the New Orleans families having little children, they may be considered a representative group. Most of the parents are of native birth. In only 17 families are the parents foreign born, and in only 5 are they negroes. Although no definite information was received concerning incomes, the families are of about the same economic status as those included in the Washington study, where more than three-fourths of the families were living on \$20 a week or less. Like the Washington and Baltimore mothers, however, the New Orleans mothers included in the study may be considered as perhaps a little more aware of the importance of milk for children than the average mother in similar circumstances, who has not had the benefit of the advice of visiting nurses concerning the diet of her children.

To the influence of the nurses of the Child Welfare Association may be traced the very slight decrease in the amount of milk purchased by the New Orleans families studied, in spite of the marked increase in milk prices. Milk costs from 13 to about 20 cents a quart in New Orleans, the general range being between 15 and 18 cents. Although these prices represent a considerable increase over last year's prices, the decrease in 1918 in the amount of milk purchased by the group studied has been only 4 per cent. The number of families receiving no milk has decreased from 92 in 1917 to 88 in 1918. Five of the families who last year were getting no milk are being provided with free milk this year, however, and two are receiving milk at reduced prices. In all, six families this year as contrasted with one family last year are getting free milk, and 19 families this year as against 11 families last year receive milk at a reduced price.

Of especial interest is the fact that, in spite of increasing milk prices, a tendency is shown to purchase milk of a better grade. The New Orleans milk ordinance requires only that milk sold at retail in less than 5-gallon lots shall be in sealed containers and shall have a butter-fat content of 3.5 per cent. Inspected milk produced under the supervision and approval of the milk commission (an organization of interested citizens) is, however, available; also pasteurized milk, which is furnished by some distributors on their own initiative, though pasteurization is not required by law. Last year inspected milk formed only 22.6 per cent of the total amount of milk purchased by the families studied, while this year it forms 28.3 per cent. Although the purchase of milk that is neither pasteurized nor inspected has been reduced from 55 per cent of the total milk purchase, it still constitutes more than half (52.7 per cent) the total purchase. The families studied have decreased their purchase of pasteurized milk, the most expensive grade, from 20.9 per cent in 1917 to 17.6 per cent in 1918.

The New Orleans study, like the other studies in the use of milk, demonstrates the need for public action in placing clean milk within the reach of every family having little children. There is cause for grave concern in the fact that 41.7 per cent of the New Orleans families studied are getting no milk at all for their children. That this proportion, in the face of high milk prices, is not greater may be attributed to the fact that many of these New Orleans mothers are sufficiently aware of the importance of fresh milk as a food for children to make sacrifices to keep it in the diet of their children.

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Total daily consumption of fresh milk by all families studied,^a 1917 and 1918.

| | 1917 | | 1918 | |
|------------------------|------------------|-----------|------------------|-----------|
| | Quarts daily. | Per cent. | Quarts daily. | Per cent. |
| Total consumption..... | 134.7 | 100.0 | 129.3 | 100.0 |
| Inspected..... | 30.4 | 22.6 | 36.6 | 28.3 |
| Raw..... | 74.2 | 55.1 | 68.1 | 52.7 |
| Pasteurized..... | 28.2 | 20.9 | 22.8 | 17.6 |
| Skim..... | 1.9 | 1.4 | 1.8 | 1.4 |

^a Of the 211 families studied, 92 in 1917 and 88 in 1918 received no fresh milk. In 1918, five of the 92 families who were getting no fresh milk in 1917 are getting it free, and 2 are getting it part free; 1 family received free milk in 1917, and 6 are receiving it in 1918.

Comparison of average daily consumption of fresh milk by 413 children, 2 to 7 years of age, to recommended daily allowance of 1½ pints for each child.

| | Recom-mended daily al-lowance (cups). | Actual consumption. | |
|-----------------------|---|---------------------|---|
| | | Cups. | Percentage of recom-mended allowance. |
| Last year (1917)..... | 1,239 | 538.4 | 43.5 |
| This year (1918)..... | 1,239 | 517.6 | 41.8 |

Distribution of families according to change in amount and use of fresh milk, 1917 to 1918.

| | |
|---|-----|
| Total number of families studied..... | 211 |
| Families using same as last year..... | 96 |
| No milk either year..... | 64 |
| Some milk both years..... | 32 |
| Families using more than last year..... | 52 |
| No milk last year..... | 28 |
| Some milk both years..... | 24 |
| Families using less than last year..... | 63 |
| No milk this year..... | 24 |
| Some milk this year..... | 39 |

Number and per cent distribution of children 2 to 7 years of age by average daily consumption of fresh milk, 1917 and 1918.

| | 1917 | | 1918 | |
|--|---------|-----------|---------|-----------|
| | Number. | Per cent. | Number. | Per cent. |
| All children..... | 413 | 100.0 | 413 | 100.0 |
| Drinking fresh milk..... | 133 | 32.2 | 98 | 23.7 |
| Less than 1 cup..... | 11 | 2.7 | 14 | 3.4 |
| 1 cup but less than 3..... | 76 | 18.4 | 64 | 15.5 |
| 3 cups or more..... | 46 | 11.1 | 20 | 4.8 |
| Having no fresh cows' milk to drink..... | 247 | 59.8 | 310 | 75.1 |
| Breast fed..... | 33 | 8.0 | 5 | 1.2 |



Daily consumption, 1918, of fresh milk by children under 2 years not breast fed.

| | Number. | Per cent. |
|----------------------------|---------|-----------|
| All children..... | 75 | 100.0 |
| Drinking fresh milk..... | 47 | 62.7 |
| Less than 1 cup..... | 4 | 5.3 |
| 1 cup but less than 3..... | 17 | 22.7 |
| 3 cups or more..... | 26 | 34.7 |
| Having no fresh milk..... | 28 | 37.3 |

Children 7 years and younger drinking no fresh milk (breast-fed babies excluded).

| | Number. | Percent. |
|---|---------|----------|
| All children..... | 338 | 100.0 |
| Having milk in other foods ^a | 44 | 13.0 |
| Having tea and coffee..... | 245 | 72.5 |
| Having family diet..... | 49 | 14.5 |

^a Includes 8 children on condensed milk.

Fresh milk consumption, 1917 and 1918, by age of children in family.

| | Number. | Per cent. |
|--|---------|-----------|
| Total number of families studied..... | 211 | 100.0 |
| Families buying same as last year..... | 96 | 45.5 |
| With children under 1 this year; none last year..... | 47 | 49.0 |
| With children under 1 last year; none this year..... | 23 | 24.0 |
| Children under 1 this year and last year..... | 4 | 4.2 |
| No children under 2 this year..... | 22 | 22.9 |
| Families buying more milk than last year..... | 52 | 24.6 |
| With children under 1 this year; none last year..... | 21 | 40.4 |
| With children under 1 last year; none this year..... | 22 | 42.3 |
| Children under 1 this year and last year..... | 2 | 3.8 |
| No children under 2 this year..... | 7 | 13.5 |
| Families buying less milk than last year..... | 63 | 29.9 |
| With children under 1 this year; none last year..... | 28 | 44.4 |
| With children under 1 last year; none this year..... | 14 | 22.2 |
| With children under 1 this year and last year..... | 2 | 3.2 |
| No children under 2 this year..... | 19 | 30.2 |

Comparison of canned milk consumption, 1918, in Baltimore, Washington, and New Orleans.

| | Families | Weekly consumption (cans). | Average family consumption weekly (cans). |
|------------------|----------|----------------------------|---|
| Baltimore..... | 365 | 588.7 | 1.60 |
| Washington..... | 272 | 202.8 | .74 |
| New Orleans..... | 211 | 714.0 | 3.38 |